

INSTITUTE *of* STATISTICS

OXFORD

Bulletin Vol. 6.

July 1, 1944

No. 9

EDITORIAL NOTE.

Subscriptions to the BULLETIN should be sent to Basil Blackwell, 49 Broad Street, Oxford; the cost of each issue is 2s. 6d., and of a yearly subscription (three-weekly issues) 22s. 6d.

The views and recommendations put forward in signed articles are those of the respective authors, and not necessarily those of the Institute of Statistics or of the Editor of the BULLETIN.

CONTENTS

- | | | |
|---|-----|--------|
| 1. THE WHITE PAPER ON THE NATIONAL INCOME AND EXPENDITURE IN THE YEARS 1938—1943, by M. Kalecki | ... | p. 137 |
| 2. FOOD CONSUMPTION IN THE UNITED KINGDOM, THE UNITED STATES AND CANADA, by T. Schulz | ... | 145 |
| 3. DIARY—India's Foreign Balance | ... | 151 |

THE WHITE PAPER ON THE NATIONAL INCOME AND EXPENDITURE IN THE YEARS 1938—1943

The White Paper (Cmd. 6520) brings up to date the estimates given in the previous White Papers and in addition furnishes new and very valuable information: (1) Important corrections are introduced in the figures for 1938, 1940, 1941 and 1942. (2) Estimates for 1939 are given for the first time. (3) The pay and allowances of H.M. Forces and Auxiliary Services, which were previously lumped together with salaries and wages, are now shown separately. (4) What was called in the previous White Papers 'Private net investment at home and war losses made good' was obtained as a balance between: (a) National Income + Indirect taxes and war risk insurance premia—Subsidies and (b) Personal expenditure on consumption + Expenditure of public authorities on goods and services + Private and Government net investment abroad. This balance contains *inter alia*: personal expenditure involved in the acquisition of property and life assurance, increase in work in progress on government account held under private finance, expenditure incurred in making good war damage to buildings. These three items are now excluded from the above balance and shown separately, while it is the residual of the balance that is now called 'Private net investment at home and war losses made good.' This item appears to be negative in all war years which shows that 'disinvestment' has occurred. This

PUBLISHED BY BASIL BLACKWELL, OXFORD

'disinvestment' actually covers: (a) reduction in the value of stocks and working capital except that caused by war damage and disregarding the increase in work in progress on Government account held under private finance (the latter item is shown separately); (b) excess of maintenance and depreciation allowances over expenditure on new fixed capital except that on making good war damage to buildings (which is shown separately); (c) sales to public authorities of fixed assets previously owned privately.

The additional information contained in the new White Paper facilitates considerably the discussion of the problems which were examined in this BULLETIN a year ago on the basis of the 1942 White Paper.¹

THE RELATIVE SHARE OF WAGES IN THE PRODUCT OF INDUSTRY

As in the corresponding article in 1943 we shall calculate first the relative share of wages in the national income not including in either the remuneration of soldiers. As in this year's White Paper wages in the strict sense are shown separately from the pay and allowances of H.M. Forces and Auxiliary Services we obtain directly:

		1938	1939	1940	1941	1942	1943
National income	£m.	4,604	4,968	5,945	6,885	7,604	8,172
Pay and Allowances in cash and kind of H.M. Forces & Auxiliary Services	£m.	80	127	388	653	861	1,086
National Income less soldiers' remuneration	£m.	4,524	4,841	5,557	6,232	6,743	7,086
Wages	£m.	1,728	1,826	2,107	2,412	2,701	2,909
Relative share of wages	%	38.2	37.7	37.9	38.7	40.1	41.1

The relative share of wages in the national income, less soldiers' remuneration, was more or less stable at the pre-war level up to 1941; in 1942 and 1943 it was significantly higher than in 1938. As we shall see, however, this is due to the relative fall in the income of 'non-wage industries,' namely of real estate and retail trade (the latter employs shop assistants, but they are classified in the White Paper as salary earners) and to the fall of overseas incomes. To eliminate these factors we subtract rents, gross income of the retail trade and (very roughly) overseas incomes from the national income before calculating the relative share of wages.

The sum of rents (only residential, because rents on factory buildings etc., which are mostly imputed, must be considered rather a part of the income of the respective business) and the gross income of the retail trade has been estimated in the article quoted for 1938, 1940, 1941 and 1942. We have revised these estimates.² Using the same method

¹ BULLETIN Vol. 5, No. 8 and 9. The figures obtained below are somewhat different from those obtained in the articles quoted. This is due to the corrections introduced in the White Paper and to new information supplied, which enables us to dispense with our own rough estimates of certain items.

² The main correction consists in making good the following omissions in last year's calculation. Residential rents were estimated there by deducting from the expenditure of consumers on rents, rates and water charges an estimate of the aggregate rates and water charges. However, to obtain the *net* rents the allowance for repairs must also be deducted.

we have also made estimates for 1939 and 1943. We now subtract the respective figures from the national income and calculate the relative share of wages on a new basis:—

		1938	1939	1940	1941	1942	1943
National income less soldiers' remuneration	£m.	4,524	4,841	5,557	6,232	6,743	7,086
Estimate of residential rents and gross income of retail trade	£m.	960	970	970	950	970	950
National income less soldiers' remuneration, residential rents and inc. of retail trade	£m.	3,564	3,871	4,587	5,282	5,773	6,136
Wages	£m.	1,728	1,826	2,107	2,412	2,701	2,909
Relative share of wages	%	48.5	47.2	45.9	45.7	46.8	47.4

We must still deduct from the national income the income from overseas, which has no counterpart in wages. In 1938 the income from overseas was £235; the deduction of this amount from the national income raises the relative share of wages from 48.5 to 51.9 per cent. In the war years the income from overseas has considerably diminished, although only rough guesses are possible about its value in single years. Fortunately, because of the increase of the national income in war-time, the influence of even large errors in these guesses is of small importance for the relative share of wages. This may be estimated now (in round figures) as follows:—

Hypothetical relative share of wages in the national income after deduction of soldiers' remuneration, residential rents, gross income of retail trade, and overseas income.

	1938	1939	1940	1941	1942	1943
%	51.9	50.0	48.0	47.0	48.0	48.5

This series gives us some idea of the movement of the relative share of wages in the national income after eliminating the influence upon it of the relative decline of important 'non-wage industries' in war-time. We shall now try to interpret this movement.

We see that the relative share of wages shows a continuous fall from 1938 to 1941 and a rise in 1942 and 1943. However, the level reached in that year is lower than in 1938 (and 1939).

It is interesting to notice that already in 1939 a significant fall as compared with 1938 is noticeable. Part of the decrease may be perhaps explained by high profit margins in armament contracts. (As an instance of these may be mentioned contracts for the construction of warships ordered from 1936 to 1939 described in the report of the Committee of Public Accounts issued in 1943.) In 1940 this factor must have been of much smaller importance; although some contracts concluded in previous years were still running, they were swamped by new ones in which profit margins were much lower. There is, however, another factor which would account for a lower relative share of wages in the latter year as compared with 1938 (and 1939). The rise in the prices of raw materials in 1940 as compared with 1938 was much steeper than that in wage costs. If, as is plausible to assume, firms fix their prices normally by 'marking up' prime costs, i.e. costs of materials and wages, overheads *plus* profits increase roughly in the same proportion as prime

costs. Thus, if raw material prices rise more than wages, overheads *plus* profits also increase more than wages.

The further fall in the relative share of wages from 1940 to 1941 cannot be attributed to this factor as there was no important change in the ratio of prices of raw materials to wage costs. But in this period there was an inflationary rise in prices in certain consumption goods, i.e. price increases out of proportion to prime costs, due to demand outrunning supply. (A further reduction in profit margins in Government contracts probably offset partly the effect of this inflationary factor upon the relative share of wages.) In 1942 and 1943 the more rigid handling of contract prices and price control over consumption goods, while wage rates were still increasing, succeeded in reversing the movement of the relative share of wages, although there might have been still inflationary price increases in some sectors.¹

DISINVESTMENT

According to the White Paper the total amount of private disinvestment at home in the four years 1940—43 is £763 million. We shall try to estimate this item in another way; in doing so we may also shed some light upon its components. As has been stated above (p. 138) these are: (a) the reduction in the value of inventories except that caused by war damage and disregarding the increase in work in progress on Government account financed privately; (b) the excess of maintenance and depreciation allowances over expenditure in new fixed capital, except that on making good war damage to buildings; (c) sales to public authorities of fixed assets previously owned privately.

We shall try first to make a reasonable guess for item (a). Let us start from the data on retail trade given in the Bank of England Statistical Summary. In 1943 the value of non-food sales was 93 per cent of the 1939 level, and the value of non-food stocks at the end of 1943 was 98 per cent of that at the end of 1939. Retail sales at 1938 prices have been estimated to have fallen from pre-war to 1942 by about 45 per cent. There was some further small fall from 1942 to 1943. Judging from the Bank of England data just quoted stocks must have fallen a little less, and thus we can take 45 per cent as an estimate of the fall in non-food retail stocks up to 1943. The value of the relevant retail sales in 1938 may be estimated at about £900 million which, assuming a period of turnover of 3 months, amounts to a level of stocks of £225 million at the end of 1938. The reduction of 45 per cent in this is about £100 million (at 1938 prices).

We have seen that the non-food retail stocks have fallen more or less proportionately to the volume of sales. If we assume the same to be true with regard to manufacturing of non-food goods for home consumption and of goods produced for export, the resulting reduction of stocks and working capital may be estimated at £350 million at 1938 prices.² Together with the reduction in retail non-food stocks this

¹ The movement of the relative share of wages was of course affected by many factors not taken into account in the above interpretation. We have picked out only what seemed to us the most important determinants.

² See M. Kalecki 'War Finance in 1940, 1941 and 1942,' BULLETIN Vol. 5, No. 9, p. 140.

amounts to £450 million (at 1938 prices). To this should still be added the reduction in the stocks of wholesalers, but there is also an offsetting factor, namely the reduction in stocks caused by war damage which must *not* be accounted for in our estimate. These two items may be well of the same order and we shall take £450 million at 1938 prices as the total disinvestment in stocks and working capital in production and distribution of non-food goods for home consumption and of goods in the period 1940—43 for export. This probably gives an approximation to the *total* disinvestment in stocks and working capital. The reduction in stocks of food, drink and tobacco was probably a small item. (The reduction in fixed capital under construction is assumed to be accounted for in disinvestment in fixed capital.) At current prices this disinvestment may be estimated on the basis of available wholesale and retail price indices at something like £700 million.

It is not, however, this figure which is the component of the White Paper figure of total disinvestment. Indeed, the White Paper figure includes the change in the value of inventories, while what we have calculated is the value of the quantitative reduction of inventories. Owing to the considerable appreciation of inventories in war years (in particular 1940 and 1941) the former figure is much smaller than the latter: the fall in the *volume* of stocks was partly offset by the rise in the *value per unit*. According to Mr. Barna¹ the total appreciation is of the order of £500 million. Thus out of £700 million, which is the value of the quantitative reduction, only £200 million will be left as a measure of the reduction in the value of inventories (exclusive of the value of the quantitative change of fixed capital under construction).

We shall now examine the items (b) and (c), i.e. disinvestment in fixed capital and sales of fixed assets to public authorities. Our starting point is the White Paper disinvestment figure for 1943, which is given as £250 million. The reduction in stocks in that year must be assumed rather small, as the fall in output and consumption of non-food goods and probably in exports had more or less ceased. We may suppose that the current value of the quantitative reduction in that year was something of the order of £50 million. There was, judging from the price indices, no significant appreciation or depreciation of stocks so that we assume the fall in the value of inventories at £50 million, which leaves us with £200 million for disinvestment in fixed capital and sales of fixed assets to public authorities. The pre-war allowances for maintenance and depreciation are estimated in the White Paper at £340 million.² For war-time, owing to greater wear and tear, something like £370 million may be assumed. Deducting £200 million, we obtain £170 million as a measure of gross investment minus sales of fixed assets to public authorities. What about the previous war-years? The *volume* of gross investment was probably higher, especially in 1940 and possibly also in 1941. The *prices* of investment goods were, however, lower and the sales of fixed assets probably higher than in 1943. On balance the average rate of excess of depreciation allowances over gross investment *plus* sales of fixed assets to public authorities might be not

¹ *Economic Journal* June—September 1943, p. 264.

² Exclusive of the greater part of the outlay on repairs except on those to buildings.

very different from that in 1943, i.e. £200 million, and for the four years 1940 to 1943 this would make £800 million. This together with the decrease in the value of inventories estimated above at £200 million would amount to £1,000 million. It is this figure that is comparable with the total war-time disinvestment given in the White Paper at £763 million. The difference is considerable, but this is not surprising in view of the extremely shaky basis of our estimates and of possible considerable errors in the White Paper figures which are obtained as relatively small balancing items of two large amounts and therefore are considerably influenced even by small relative changes in these amounts. In our calculation the estimate of the disinvestment in fixed capital *plus* sales of fixed assets to the Government is particularly precarious: if for instance the White Paper figure for disinvestment in 1943 were not £250 but £200 million, which might easily be the case, we would obtain £600 instead of £800 for disinvestment in fixed capital and thus £800 million for total disinvestment; while the White Paper figure for disinvestment, if its estimates for years prior to 1943 are assumed correct, would be £713 million.

It is fairly likely on the basis of the above discussion, that our estimate of £1,000 million as the total disinvestment during the war is too great, so that we may take it as the upper limit. What is the *real* disinvestment corresponding to this figure? We have assumed that stocks and working capital in the 'civilian sector' fell proportionately to output. With regard to disinvestment in fixed capital, it has been assumed that the rate of gross investment *minus* sales of fixed assets to the Government was at the rate of £170 million p.a. at current prices, which makes something like £120 million at 1938 prices. Depreciation in war-time, based on purchase cost of equipment was taken as £370 million; and thus gross investment *minus* sales of fixed assets to the Government at 1938 prices would amount roughly to one-third of depreciation, and gross investment by itself to something like 40 per cent of depreciation (or more).

The conclusion emerges from our analysis that gross investment in fixed capital was probably at a higher level than 40 per cent of depreciation (part of it, however, was used to make good war damage) and that stocks and working capital in the 'civilian sector' were not reduced more than proportionately to output. The latter explains why the considerable reduction of inventories did not affect the functioning of production and distribution in that sector.

It should be stressed that the disinvestment both in fixed and in working capital discussed above applies only to the *private* sector of the economy. It is quite possible that the Government has *accumulated* stocks of goods in war-time. As to Government investment in fixed capital not only have many State owned factories been built, but also the Government has financed a large amount of investment in privately owned establishments and this investment is *not* accounted for either in the White Paper figures of disinvestment or in our guesses. It is, of course, difficult to assess to what extent this investment will remain useful for the economy after the termination of hostilities.

PERSONAL SAVINGS

The aggregate personal income may be divided into three components: (a) direct tax payments, inclusive of those due for repayment after the war but exclusive of death duties and stamps on the transfer of property; (b) personal expenditure on consumption; (c) gross personal savings. The latter in turn may be subdivided into: (1) death duties, etc.; (2) excess of direct tax liabilities over tax payments; (3) costs involved in the acquisition and transfer of property and life assurance by persons; (4) net personal savings. Gross savings provide a measure of savings out of current spendable income, if we make the plausible assumption that people budget their expenditure on the basis of their incomes net of taxes *paid*. The personal savings ratio on this assumption will be that of gross personal savings to personal income after payment of direct taxes (inclusive of those due to repayment after the war but exclusive of death duties, etc.). This ratio was as follows in the period 1938-43:—

<i>The Saving Ratio</i>						
	1938	1939	1940	1941	1942	1943
%	7.4	9.4	17.7	20.1	22.8	25.0

If we deduct these percentages from 100 we obtain the percentage part of spendable income consumed. The White Paper gives further the indices (1938=100) of real personal consumption, i.e. of the personal consumption in terms of constant prices. If we divide them by the percentages of spendable income consumed and relate the series obtained at the 1938 level, we obtain what may be called an index of real personal spendable income:—

<i>Real Consumption and Real Income</i>						
	1938	1939	1940	1941	1942	1943
Real personal consumption (1938=100)	100	100	88	82	81	79
Consumption out of spendable income %	92.6	90.4	82.3	79.9	77.2	75.0
Real personal spendable income (1938=100)	100	102.5	99	95	97	97.5

The percentage of spendable income saved increased very considerably in spite of a slight fall in the real spendable income. This increase is thus entirely due to war-time conditions, because normally a fall in real income reduces the saving ratio. In 1940 it was mainly the voluntary effort which increased the saving ratio, while rationing and general uncertainty (which discouraged buying of household goods, etc.) played only a secondary role as stimulants of saving. The increase in the saving ratio in the subsequent years, however, was probably due mainly to limitation of consumption by rationing and shortages.

We shall now compare the rise in personal savings with that in so-called small savings (Savings Bank Deposits, National Saving Certificates, and 3% Defence Bonds). We take personal savings net of death duties, etc. and costs of acquisition and transfer of property, but gross of the excess of tax liabilities over tax payments. To the 'small savings' should be added the rise in coin and note holdings in the hands of 'small men' which most probably constituted a substantial part of the increase in the note and coin circulation. As there is no way of esti-

mating precisely what part it was, we show in the Table both 'small savings' proper, and small savings plus the increase in the coin and note circulation. The adjusted figure of 'small savings' is somewhere in between. For both these two variants we calculate the difference as compared with 1938 level, and compare the result with the corresponding difference in personal savings, by calculating the ratio of the latter to the former.

'Small Savings' and Personal Savings

		1938	1940	1941	1942	1943
1. Small Savings	£m.	4	467	601	600	719
1a Rise over 1938 level	£m.	0	463	597	596	715
2. 'Small Savings' plus increase in cash circulation*	£m.	—3	541	744	769	886
2a Rise over 1938 level	£m.	0	544	747	772	889
3. Personal savings net of death duties, etc.	£m.	166	773	987	1,269	1,490
3a Rise over 1938 level	£m.	0	607	821	1,103	1,324
4. Percentage (1a) : (3a)			76	73	54	54
5. Percentage (2a) : (3a)			90	91	70	67

* The increase in cash circulation is calculated as the difference of coin and note circulation outside banks in January of the next year and January of the year considered (Source : Statistical Summary of the Bank of England).

In 1940 and 1941 these ratios in both variants are much higher than in 1942 and 1943. This may be explained by the great role played in 1940 and 1941 by transfers from other assets and investment of current savings of large savers. This process, however, could not continue indefinitely, because of the exhaustion of transferable assets of small savers and the reaching of the statutory limit of the respective small savings holdings by the large ones.

M. KALECKI.

FOOD CONSUMPTION IN THE UNITED KINGDOM, THE UNITED STATES AND CANADA

The Report on Food Consumption Levels in the United States, Canada and the United Kingdom,¹ prepared by the Special Joint Committee of the Combined Food Board, analyses the food supplies in the three countries before and during the war. For the first time the methods of computation of the quantities available, as well as of average nutritional intake, have been placed on a truly comparable basis for different countries, so that it is now possible without incurring any serious error, to compare in absolute figures the average supply of nutrients instead of only trends of supply. To provide such figures was, indeed, the main purpose of the Report, which was commissioned in order to obtain a statistical outline for considering 'the entire food resources of Great Britain and the United States' and Canada as 'a common pool.'²

The Report limits itself to the levels of food available for civilian consumption. The resulting picture for each country of average supplies and average nutritional intake is, therefore, highly realistic in that it gives a straightforward answer to the question, 'What actually was available per head before the war and what is available now, under an emergency system of government control of food production and consumption, of imports and exports?' The answer to this is summarized in the first nine columns of Table I. Of these, the first six give absolute data of consumption of the main foods per person per week, while the following three measure the changes that occurred since the war. The figures of pre-war consumption are derived from the annual averages from 1934 to 1938 for the United Kingdom, and from 1935 to 1939 for the United States and Canada.

The differences in the actual supplies of food as well as the trends of consumption revealed in the indices are striking, and a perusal of the several columns certainly does not make the concept of a 'common pool' obvious. It would, however, be naive to assume that countries so vastly different in size as well as in the structure of their populations could feed their respective populations in an approximately identical way. A small country like the United Kingdom, with a fairly homogeneous population and with a strong central administration, can make and enforce comprehensive laws giving to each person an equal share of all the main foods that are in short supply, which it would be impossible to do for a quasi-continent such as the United States or Canada. In these countries, too, control of production and consumption has been established efficiently; but whatever their methods of rationing, they must be more elastic and less comprehensive than in the United Kingdom, partly for administrative reasons and partly because in a country with in its several parts widely differing climatic conditions, food habits and food requirements also differ widely. This greater latitude in the supply of food to the individual tends towards a more wasteful distribution, since with a given stock of food the greater the individual choice

¹ H.M. Stationery Office, 1944.

² Joint statement made in June 1942, by the President of the United States and the Prime Minister of the United Kingdom, quoted in the *Introduction to the Report*.

TABLE I

Consumption of Food per Head per Week

	U.K.		U.S.A.		Canada		Index of Consumpt. 1943 ¹⁰		Pre-War	
	Pre-war	1943	Pre-war	1943	Pre-war	1943	U.K.	U.S.A.	U.S.A. Farmers	U.K. Families
Meat ¹	34.6	26.3	34.4	36.1	29.9	33.9	(Pre-war figures = 100)			
Poultry, Game, Fish ¹	oz.						76	105	113	
Fresh Milk ²	oz.	5.8	8.0	8.5	7.9	8.1	61	106	102	41.5 ¹⁷
Manufactured Milk ³	pt.	4.3	4.9	6.0	5.4	6.2	134	123	115	10.4 ¹⁸
Cheese	pt.	0.6	0.8	0.8	0.6	0.9	105	96	149	3.1
All Milk Products ⁴ in Terms of Liquid Milk	oz.	3.6	2.2	2.1	1.2	1.2	134	94	103	0.5
	pt.						128	117	118	3.6
Eggs ⁵	No.	3.5	5.5	6.3	4.7	5.8	94	116	124	—
Butter	oz.	7.6	2.3	5.2	4.1	9.1	31	79	96	6.7 ¹²
Margarine	oz.	2.8	5.3	0.9	1.3	—	192	148	—	7.1
Other Fats	oz.	5.4	5.4	9.0	9.3	6.0	100	103	120	7.4 ¹³
Sugar ⁶	oz.	29.1	20.0	32.4	25.8	29.8	69	80	82	7.9 ¹⁴
Grain Products ⁷	oz.	64.9	76.1	61.8	61.9	63.7	117	100	104	23.6 ¹⁵
Potatoes	oz.	54.5	78.7	43.9 ⁸	47.7 ⁹	59.0	145	109	107	67.2
Greens	oz.	23.8	30.1	15.2	15.6	4.9	127	103	99	59.1 ¹⁶
Carrots	oz.	3.8	6.6	3.1	3.0	4.7	172	97	115	26.4 ¹⁶
Tomatoes ⁸	oz.	4.0	3.4	10.3	11.3	5.6	86	110	92	13.4
Other Vegetables ⁸	oz.	17.9	24.0	27.2	30.2	14.3	134	111	91	24.3
Citrus Fruit ⁸	oz.	9.4	2.2	14.1	17.0	7.8	23	120	148	8.9
Other Fruit ⁸	oz.	28.8	16.0	46.6	32.0	24.5	56	69	91	44.3

¹ Edible Weight. ² Including skimmed and butter milk, and milk in ice cream. ³ Evaporated, condensed, dried; all in terms of fresh liquid milk. ⁴ Including cream but excluding butter. ⁵ In shell, dried and frozen liquid. ⁶ Including sugar content of syrup, honey, jam, sweets, etc. ⁷ Mainly flour. ⁸ Including tinned and dried. ⁹ Including sweet potatoes. ¹⁰ Based on annual consumption per head. ¹¹ Underestimated, since pork fat ("salt-side") is included under Other Fats. ¹² In shell only. ¹³ Margarine, lard, and shortening. ¹⁴ Inflated because of the inclusion of fatty foods (salt-side; mayonnaise) with their gross weight. ¹⁵ Sugar only; average consumption of honey, syrup, preserves, and sweets 6.9 oz. ¹⁶ Including yellow root vegetables. ¹⁷ Fish only, including wastage. ¹⁸ Sugar as bought. Jams, jellies, syrup, etc., 5.4 oz.; sugar consumed in other forms, 9.5 oz. ¹⁹ In terms of flour.

the greater the possibility of nutritional deficiencies on the one hand, and waste on the other. Hence in order to attain a given nutritional standard, relatively more food will be required than under a system of strict rationing.

The fundamental difference as regards the total supply of food of the three countries that flows into civilian consumption lies, however, in the fact that the United Kingdom is largely dependent on imports, while the United States and Canada are nearly self-supporting and exporters. This, obviously, will have some repercussion on consumption habits; the farmer will tend to be more lavish in the use of certain foods—especially of those which he himself produces—than the man of similar social standing who has to acquire all his food in the open market. There will be relatively more milk in the farmer's diet, more eggs, and, besides, more grain products, potatoes, and vegetables, since, on the one hand, the first class protein foods—milk and eggs—increase the palatability of a simple diet, while, on the other, a somewhat over-generous supply of grain, potatoes, and vegetables, which eliminates the necessity of eating stale food, is not wasteful from the farmer's point of view: what is not eaten at his table goes to feed his animals. A typical average diet of farming households in the United States in 1935/6 is illustrated in the last but one column in Table I. It has been compiled from data that were published by the United States Department of Agriculture¹ for families in five different regions of the United States, all of which had a food consumption per head per week of between 2.08 and 2.76 dollars, which was found by the investigators to be one of the most usual levels. It includes the money value of all the home-produced food consumed by the family. The figures given in Table I are the un-weighted averages of the data published for the five regions, since it would have served no useful purpose to weight them by the number of families that supplied the information. The combined figure for the consumption of meat, game, poultry, and fish, should be read in conjunction with that for 'other fats,' which includes 'salt-side'—fat pork without any lean. This diet may be compared with that shown in the last column of Table I, which is taken from Sir John Orr's book *'Food, Health, and Income.'* It gives the average pre-war diet of a random sample of United Kingdom families whose food expenditure about corresponds to that of the farmers' families. It will be found that as regards milk, eggs, fats and fat foods, vegetables, and fruit, the American farmers' diet was decidedly more generous than that of the United Kingdom families. It indicates what in any case it would have been common sense to assume, namely, that in communities with approximately similar general standards of living average food consumption will tend to be the higher the larger the agricultural sector and, more particularly, the larger the sector of independent farmers.

It is, therefore, interesting to obtain some idea of the relative distribution of the populations of the three countries between agricultural and other pursuits. The relevant figures, derived from the last census figures for each country, are set out in Table II. It will be seen that while in the United Kingdom less than 3 per cent of all gainfully occupied males

¹ *Family Consumption and Dietary Levels* (Misc. Publ. No. 405).

TABLE II
Males gainfully occupied in Agriculture

Census Year	Total Population millions	Males Gainfully Occupied		
		All % of Total Population	% of All Males Total	Agriculture Occupied Pd. Workers
U.K.	1931	44.8	33.0	8.0
U.S.A.	1930	122.8	31.0	25.8
Canada	1931	10.4	31.5	36.8
				5.1
				10.7
				7.7

were independent farmers or members of farmers' families, in the United States these accounted for 15 per cent and in Canada for 29 per cent. These differences in the occupational structure are, naturally, reflected in the figures of agricultural production of the three countries, which are given in Table III. In all cases these figures refer to the

TABLE III
Agricultural Production per Head of Population

		Production per Head per Week		
		U.K.	U.S.A.	Canada
Milk, total	pt.	4.9	12.7	22.7
Butter	oz.	0.7	5.5	9.8
Margarine	oz.	3.1	0.5	—
Cheese	oz.	0.8	1.2	3.4
Potatoes	lbs.	4.8	3.5	8.6
Wheat	lbs.	1.3	6.9	38.8
		Number of Animals Slaughtered		
		Index Weighted by Population		
Cattle and Calves		100	292	281
Sheep		100	84	78
Pigs		100	636	656

respective census years, with the exception of those for wheat, which are five-yearly averages, based on the production from 1930 to 1934. During that period Canada exported about 60 per cent of her wheat crop in the form of grain and flour, and the United States nearly 7 per cent, while the United Kingdom imported about $4\frac{1}{2}$ times as much as it grew. Previous to the slump, the United States had exported for a number of years a full quarter of their annual wheat crop, and Canada as much as three-quarters.¹ Of the Canadian cheese production in 1930/1 nearly seven-tenths were sent abroad. Bearing in mind not only these exports but, further, those of evaporated and condensed milk and of meat and meat products, the data in Table III give a fair indication of the relative amounts of basic home-produced foods available in each country—including a proportion of feeding stuffs in the cases of wheat, potatoes, and also milk.

The data in Tables II and III, although they provide some explanation for the different levels of consumption in the three countries, do not in themselves throw any light on the very different trends of food supplies in the three countries. For while the supply of nutrients in terms of calories, animal protein, and fat has decreased in the United Kingdom since the war, it has increased in the United States as well as in Canada (Table IV). The decline in calories in the United Kingdom is,

¹ *Commodity Control in the Pacific Area* (Ed. W. I. Holland), pp. 44, 151.

TABLE IV

Supplies of Nutrients Available for Civilian Consumption and Average Requirements

		U.K.		U.S.A.		Canada		Average minimum requirements
		Pre-war	1943	Pre-war	1943	Pre-war	1943	
Calories		2980	2830	3080	3130	3020	3120	2550
Protein	Total gm.	81	87	89	95	88	97	66
	Animal gm.	43	40	51	56	49	57	—
Fat.	gm.	130	113	132	138	122	133	—
Calcium	mgm.	690	1050	870	1000	830	960	800
Iron	mgm.	13	16	14	16	15	16	10
Vit. A.	I.U. ¹	4700	5000	6490	6980	6130	6780	3700
Vit. C	mgm.	112	127	99	106	58	61	60
Vit. B ₁	mgm.	1.4	2.1	1.8	2.4	1.9	2.0	1.2
Riboflavin	mgm.	1.6	2.1	2.0	2.3	1.8	2.1	1.7
Niacin	mgm.	18	19	18	20	17	19	12

¹ International Units.

however, probably only apparent in relation to the individual consumer, and simply reflects the elimination of avoidable wastage of food. At the same time, the increase in calories in the United States and Canada may be partly due to an increase in unavoidable wastage of 'marginal' supplies, resulting from a shortage of manpower and difficulties in distribution at an economic price. Yet this reason, though it may be valid as regards calorific supply in general, cannot hold good to any considerable extent with respect to animal protein and fat. There can be no doubt that the consumption of both these nutrients has been sharply curtailed since the war for the people of the United Kingdom, and it might have been expected that for the United States and Canada consumption would at least have been stabilized. A probable explanation for the upward trend seems to be that in these countries the all-round increase in the earnings of the lowest and normally underfed income groups has increased their effective demand for these nutrients, without proportionately curtailing consumption and, possibly, waste, in the higher income groups, owing to the absence of comprehensive rationing in these two countries.

The average minimum ('restricted') requirements of the several nutrients as suggested in the Report are given in round figures in the last column of Table IV.¹ The Report states that for calories and protein a margin of 10 per cent should be allowed between average supplies and requirements, if there is to be a reasonable chance of a satisfactory nutritional intake. It must here be pointed out that the 'minimum requirements' for calories and protein, as set out in Table IV, are identical with the 'full' intake requirements as recommended by the Food and Nutrition Board of the National Research Council of the United States, which were made the basis of all the figures of nutritional requirements of the Report. For minerals and vitamins, however, these 'minimum requirements' represent only 70 per cent of the 'full requirements' for adult men and women, except nursing and expectant mothers. For these as well as for children and juveniles up to the age of 20, the

¹ Since these figures are related to the age and sex structure of the population, they differ in the Report slightly for each country.

'full' requirements have been allowed in the Report for compiling the figures of 'restricted' average requirements. Apparently, for all the main minerals and vitamins the supply in the United Kingdom is satisfactory, though some caution is necessary in interpreting the figures of supply of vitamin C for the three countries. Theoretically, it appears that the United Kingdom has a better supply of ascorbic acid than the United States, while Canada has a supply per head which in practice certainly does not provide even the restricted requirements of vitamin C. This latter fact is incontrovertible; but in reading the data for the two other countries it should be realized that while in 1943 the United States obtained 45 per cent of this vitamin from fruit and tomatoes, and 55 per cent from potatoes and other vegetables, the corresponding figures for the United Kingdom were 13 per cent and 87 per cent respectively. Since vitamin C is much less stable in potatoes and vegetables than in tomatoes and citrus fruit and, moreover, much more liable to extreme losses through preparation and cooking; the actual average supply of it in the United Kingdom may well lie considerably below that of the United States.

There has, however, been a very gratifying steep increase in the supply of calcium in the United Kingdom, partly because of the increased consumption of milk and partly through the use of calcium fortified flour. Moreover, the system of controlled milk supply in accordance with the physiological needs of children, expectant and nursing mothers, juveniles, and adults, ensures that the calcium available in one of its main sources is distributed equitably.

In giving a broad summary of the average diets available to the civilian populations of the United Kingdom, the United States, and Canada, one would certainly be justified in saying that in all three countries the nutritional standards—as distinct from the dietetic standards—have, if not improved, then at least been kept stable. While, however, the people in the United States and in Canada appear to enjoy a more varied diet now than before the war, in spite of the imposition of limitations as regards the consumption of sugar, butter, cheese, and butcher's meat, those in the United Kingdom have to be satisfied with a diet much more monotonous than that to which they were accustomed. This in itself is not serious so long as the dietetic deficiencies do not lead to nutritional deficiencies, which are likely to occur if a very dull diet is offered for a lengthy period. The symptoms of malnutrition which in the United Kingdom appeared in 1941 were probably partly due to this; rationing was already well established, but many foods to which people were accustomed had become very scarce, and it took time for them to learn how to make the best use of those that were available.¹

T. SCHULZ.

¹ During the first half of 1942, the average calorific supply moving into civilian consumption amounted to only 2700 calories per head per day. As, however, bread, flour, and potatoes, were unrationed, this in itself need not have affected individual calorific intake, since a larger consumption of these foods would simply have further drained the existing stocks.

DIARY

INDIA'S FOREIGN BALANCE

It may be of interest, as far as the incomplete information allows it, to follow up the development of India's foreign balance. An indication of the extent to which the balance was active during the last years can be obtained by adding the sterling accumulation during the year and the amounts of sterling used for repatriation of securities. In the last financial year (April 1943–March 1944) the repatriation must have been of relatively minor importance as a very large part of the sterling debt of the government of India had already been repatriated by the end of the financial year 1942–43. The active foreign balance is, therefore, now to a large extent represented by the accumulation of sterling, which is correspondingly greater than in the years before; it amounted to Rupees 437 crores or £330 millions in 1943–44. A new factor in the balance of payments, though as yet of minor importance in the last financial year, is the import and sale of gold for account of the British government. It was reported this Spring that gold to the value of £17 millions had been sold by the Reserve bank¹, the rupee proceeds being put at the disposal of the British government for the finance of their expenditure in India. If we make allowance for these gold imports and for some repatriation of remaining sterling securities, the total *foreign balance* (i.e. acquisition of claims and gold and extinction of debt) in 1943–44 was probably of the order of Rs.480–500 crores:

<i>India's Foreign Balance</i>			
Financial Years	1941–42	1942–43	1943–44
		(crores of rupees)	
Accumulation of Sterling	100	260	437
Repatriation of Sterling securities	120	160	20–40
Imports of gold	-	-	20–25
	220	420	480–500

While the foreign balance continues to increase, the deficit in the Indian government budget is slightly decreasing, but not enough to offset the increase in the foreign balance. The sum of foreign balance and government borrowing, which constitutes the 'deficit spending' of the allies and of the Indian government together, is apparently increasing much less than before.

<i>The Foreign Balance and Deficit Spending</i>			
	1942–41	1942–43	1943–44
		(crores of rupees)	
Foreign balance	220	420	480–500
Indian Budget deficit	13	145	110
Total deficit spending	230	560	600

The following table shows how the Reserve Bank financed the increased holding of sterling balances. In 1943–44 part of the finance was provided by the gradual selling of rupee securities, which the Bank had acquired in the preceding years on the occasion of the repatriation of sterling securities.

¹ *The Times*, 8/2/44.

Reserve Bank of India	Internal Finance of Sterling Balance		Scheduled Banks	1942/43 (Crores of Rupees)	1943/44 (Crores of Rupees)
	1942/43	1943/44			
Increase in Note & Rupee coin circulation	246	241	Increase in Deposits	172	198
Increase in Deposits with the Reserve Bank	24	79	Minus Increase in Advances	17	92
Minus Increase in holding of Rupee securities	+ 38	-116	Increase in cash, balances with Reserve bank and bills	14	16
Increase in loans to Government and other Assets	- 28	-			
Accumulation of sterling	260	436	Estimated increase in security holdings	141	90

Part of the rupee securities were taken up by the scheduled banks. We can get a rough estimate of this part by subtracting from the expansion in deposits the increase in advances and other minor assets. It appears that in 1943—44 advances began a remarkable increase. It is very doubtful whether this can be connected with the finance of war production, and it would rather appear to be a symptom of the kind of speculative business boom which is the by-product of the inflation (though not by any means, as has been maintained, its primary cause).

The total increase in money in circulation (notes and coin outside banks plus deposits) was Rs.409 crores in 1942—43 and Rs.426 crores in 1943—44. As the scheduled banks in 1943—44 cannot have absorbed more rupee securities than the Reserve Bank sold (they probably absorbed less) and there was government borrowing, the public must have taken up a considerable amount of securities.

The policy of gold imports into India is explained by the desire to prevent a continuous increase in the gold price there, which might affect the willingness to hold bank notes or government securities. The gold price in India is much higher than in London; in so far as the expenditure in India is financed by gold sales, the proceeds of which are credited to the British government, the cost of this expenditure is considerably reduced, and the external purchasing power accumulated by India is *pro tanto* smaller. Recently the United States has agreed to deliver silver on lease-lend terms to India, to be returned 'ounce for ounce.' This will solve the problem of the silver price without affecting the balance of payments.

The 'external purchasing power' accumulated in the form of sterling balances is at present Rs. 990 crores, or nearly £750 millions. The United States expenditure in India leads to corresponding increases in sterling balances, but recently it has been agreed that India will have a certain part of this active balance with the United States available in form of dollars after the war.